

CLAIMS

1. An adjustment method of a display device, comprising:

an LED emission step of performing PWM control
5 independently on an LED of each of colors, red, green and blue, in a unit emission period to cause the LED to emit light;

a measuring step of measuring chromaticity of the light;

10 a calculating step of calculating a difference between a measured value obtained in the measuring step and a target white balance value;

a correcting step of correcting a duty ratio of a PWM signal on the LED of each of colors in the LED emission
15 step corresponding to the difference obtained in the calculating step; and

a duty ratio storing step of storing a duty ratio for the LED of each of colors in a storage when the difference calculated in the calculating step falls
20 within a predetermined allowable range.

2. The adjustment method of a display device according to claim 1, wherein an adjustment of the display device is made in such a state that an LCD panel is attached to a front face of the LED and that the LCD panel is driven.

25 3. The adjustment method of a display device according to claim 1, wherein in the correcting step, the duty ratio of the PWM signal for the LED of each of colors is corrected

in consideration of a distribution range of the chromaticity of the LED of each of colors.

4. The adjustment method of a display device according to claim 1, wherein the duty ratio is corrected independently on LEDs of the same color corresponding to the difference obtained in the calculating step, and independent duty ratios for the LEDs of the same color are stored in the duty ratio storing step.

5. A display device comprising:

10 a duty ratio storage which is comprised of writable memory and stores therein a duty ratio to perform PWM control independently on an LED of each of colors, red, green and blue, in a unit emission period, independently for each LED;

15 a PWM controller which forms a PWM signal based on the duty ratio stored in the duty ratio storage independently for each LED to perform PWM control independently on the LED of each of colors in the unit emission period; and

20 a signal line connected to the duty ratio storage to input the duty ratio to the duty ratio storage.

6. The display device according to claim 5, wherein the duty ratio storage stores the duty ratio provided with a white balance adjustment via the signal line.

25 7. The display device according to claim 5, wherein the duty ratio storage stores independent duty ratios for LEDs of the same color, and the PWM controller forms

independent PWM signals for the LEDs of the same color to perform PWM control independently on the LEDs of the same color in a unit emission control.